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ABSTRACT

This paper reports challenges of and suggestions for conducting online courses, focusing on the following areas: (1) instructional format, including transferring classroom activities to online activities without affecting students' concentration, motivation, thought, mastery, and comprehension; (2) methods of instruction, including developing an online learning environment that promotes student participation and applying teaching styles to electronic instruction in order to accommodate different student learning styles; (3) methods of interactions, including maintaining students' frequent and consistent involvement, encouraging student cooperation and collaboration, and applying a variety of interaction methods; (4) methods of communication, including incorporating visual, verbal, and non-verbal communication into online teaching materials; (5) instructional media, including the role of technology as the disseminator of primary course information; (6) participants, including instructors, students, and guest speakers; and (7) team work, including the importance of faculty, support staff, administrators, and policy makers. (DLS)

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Challenges And Considerations When Conducting An Online Course

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Abstract: The rapid technology development makes education no longer confined to a walled classroom. Students may receive academic degrees without stepping on university ground. Currently many faculty members are facing the challenges of conducting on-line courses. The paper reports challenges for conducting on-line courses, including instructional format, methods of instruction, methods of interactions, methods of communication, instructional media, participants, and teamwork. Considerations and suggestions are provided.

1. Introduction

The rapid technology development makes education no longer confined to a walled classroom. Students may receive academic degrees without stepping on university ground. More and more universities are encouraging faculty members to convert traditional courses to on-line courses. Currently many faculty members are facing the challenges of the new educational paradigm.

The paper will report challenges and considerations for conducting an on-line course. It is intended to share the information with instructors of institutions that plan to offer on-line courses. It is hoped that by recognizing and realizing the challenges professionals are better prepared for the electronic learning environment. It is also expected that educators will conduct more dialogue about our education system and the need of on-line courses and will further develop on-line courses of good quality when needed.

2. Challenges and Considerations

In the last decades, educators have constantly developed our educational strategies and methodologies. This development was based on an understanding of instructors and students being able to physically meet each other. However, this scenario is completely different in an on-line course environment. The advance of technology enables a teacher to educate students who are physically separated from him/her; an on-line course is an example.

Instructors are experiencing challenges when conducting an on-line course. Challenges will be discussed, and suggestions will be provided to educators for consideration when conducting an on-line course. However, as we all know, we have more questions than answers, and we are still in the process of solving the problems.

2.1 Instructional Format

In a traditional class, instructional format includes preparation, presentation, application, evaluation, and summary. It is possible to apply these steps to an on-line course. However, it is a challenge to find the right strategies to transfer classroom activities into online activities (Garrison, 1989) without affecting students' concentration, motivation, thought, mastery, and comprehension (Verdun & Clark, 1991). In addition, since a

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student will be evaluated without the teacher's presence, how can the teacher be sure that the assignments, projects, or tests are really completed by the student himself/herself?

One-hour classroom course materials might take more than three hours to complete if it is conducted in an on-line environment. To maintain students' concentration, the instructor can divide the one-hour classroom materials into several on-line sections. Thus, students can take a break between the sections and remain concentrated. Ideally distance learners are full-time workers with high learning motivation. If an instructor is concerned about the students' work, he/she can require students to be physically present for a final examination or an interview.

2.2 Methods of Instruction

Among the methods of instruction, facilitation is more popular than lecture in higher education. It promotes greater student involvement in the learning process (Brookfield, 1985). However, how can an instructor develop an on-line learning environment that promotes student participation? How can one apply different teaching styles to an electronic instruction to accommodate different student learning styles?

One may consider to frequently coordinate and mediate class activities, which require students to conduct on-line discussion. One can contextualize classroom activities with the real world, for example, by visiting local libraries, observing a class in a public school, or interviewing people in a specific field. It is also helpful to incorporate and integrate several activities into a module. Providing frequent and appropriate recognition of student responses is important.

2.3 Methods of Interactions

Classroom interactions among instructor-students and students-students are essential for successful teaching and learning (Anderson, 1993). On-line discussions, group work, and question-answer sessions can be accomplished by means of both synchronous and asynchronous modes. However, how to maintain students' frequent and consistent involvement, how to encourage student cooperation and collaboration, and how to apply a variety of interaction methods within the capability of specific computer systems and application tools become challenging.

People like to work with friends or with people they know. It would be easier for students to cooperate or collaborate with classmates who they feel comfortable with. Since in an on-line course students do not have to physically meet, it is helpful to conduct on-line ice-breaking activities at the beginning of the course, for example, having students exchange their autobiography. When conducting group activities, the instructor can encourage student cooperation by being a mediator of the group at the beginning and then letting the students take over. As to capacity of computer systems, it is always advisable to conduct a simple and easy presentation that is compatible with most hardware, operating systems, and application tools.

2.4 Methods of Communication

Methods of communication involve visual, verbal, and non-verbal communication. In a traditional classroom, they are readily integrated in the teaching and learning process to express the meanings of actions, words, and texts (James & Blank, 1993). They happen simultaneously as a subject matter is explained in classroom. In an on-line course, teaching materials are delivered electronically. The chances to integrate these three elements (visual, verbal and non-verbal) into one presentation is difficult, although it is possible (Cochenour, 1994). The success of the integration depends on (1) the capability of the system networks to perform the delivery, (2) the capability of the instructor's and students' computers to process the information, (3) the capability of the course management tools and application tools to transfer the data, (4) the ability of the instructor to design and develop the course materials that are suitable for online classes, and (5) time and money that are allocated to develop the course materials.

To overcome some of the challenges, one can consider using resources that are readily available and accessible on the Internet (Ellworth, 1994), for example using free e-mail and free webpage space. It is helpful to ask students to provide information about their computers to their classmates so that every student in the class understands their commonalties and differences. When we frequently use advanced technologies, we tend to forget other existing

technologies. Telephone is a tremendous tool for communication. It is advisable to provide a toll free number to the students to communicate with the instructor.

2.5 Instructional Media

Instructional media are usually used as a supplement to enhance learning in a classroom. In an on-line course, the role of technology is significant because it is used to disseminate primary course information (Miller & Clouse, 1993-1994). Nearly all class activities depend on the ability of technology to accommodate a variety of instructional media like video and laser disc. The technological capabilities determine whether or to what extent the media can be used to conduct communication, interaction, and instruction.

As suggested above, one can use available and accessible resources on the Internet. It is suggested that an instructor employ common application tools that are available to all students. In addition, it is recommended that instructors use simple and easy presentation media first and then gradually increase the sophistication of the instructional media.

2.6 Participants

Instructors, students, and guest speakers constitute classroom participants (James & Blank, 1993). In an on-line environment, guest speakers rarely appear. Communication among students is mostly text-based. Without personal contact, facial expressions, and social cues such as gestures and smiles, participants might feel uncomfortable of the text-only electronic communication.

It might not be efficient to invite a guest speaker to communicate with students via synchronous mode. However, it is helpful to have a panel who is willing to discuss issues with students asynchronously. It is also suggested that an instructor conduct the on-line ice-breaking activities mentioned earlier to reduce students' anxiety.

2.7 Team work

An on-line course requires teamwork of faculty members, support staff, administrators, and policy makers. In a university setting, these four team players have very busy schedules and distinct roles. For example, by the sixth year a tenure-track faculty member has to demonstrate outstanding achievements in three areas: research, teaching, and service. Similarly, the other team players have tremendous responsibilities and commitments. To offer an on-line course, the team players have to frequently get together to discuss many issues. For example: Why do we offer an on-line course? Who assesses the need of the on-line course before it gets developed? Are we ready to offer this type of courses? Do we have adequate resources? Are our technology, hardware, and software adequate? Do we have faculty members who are committed to the task? Do we have qualified support staff including technical experts, technicians, instructional designers, and on-line course managers? What policies need to be made or modified? Are we aware of the equipment our end users possess?

Many questions need to be answered before an on-line course is developed. It is not wise to jump to the development without thinking about these questions in detail. An on-line course can turn into a disaster if it is not well planned. It can cause much more damages than a traditional class. It is suggested that a team be designated to the task. The team members should include policy makers, administrators, faculty members (senior faculty preferred), instructional designers, technical experts, technicians, and on-line managers. Since the task is on-going, detailed, and time consuming, the team members should receive release time so that they can devote themselves to the task.

3. Conclusion

The advance of technology is altering our education, and educators are experiencing the shift of new education paradigms. More and more on-line courses have been offered. Challenges of conducting an on-line course include (1) using appropriate instructional format, methods of instruction, methods of interactions, methods of

communication, and instructional media; (2) encouraging participants' involvement and responding to their needs, and (3) requiring commitment of key team players: faculty members, support staff, administrators, and policy makers. Some questions have been answered; many problems remain unsolved. Educators are encouraged to share their ideas with their colleagues and continue the debate. With the current technology development, our new education paradigms may be able to serve more people with a variety of needs.

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